

Evaluation Metrics for Classification

Model Evaluation Metrics for Classification

- Confusion Matrix

Class	Positive	Negative
Positive	TP (True Positives)	FP (False Positives)
Negative	FN (False Negatives)	TN (True Negatives)



- Accuracy: $\frac{TP+TN}{TP+FP+FN+TN}$
- Precision: $\frac{TP}{TP+FP}$
- Recall: $\frac{TP}{TP+FN}$

QUESTION 1 OF 2

As we just saw, the confusion matrix gives us several different metrics we can use to measure the performance of our model. See if you can remember which formula is used to calculate each metric.

Submit to check your answer choices!

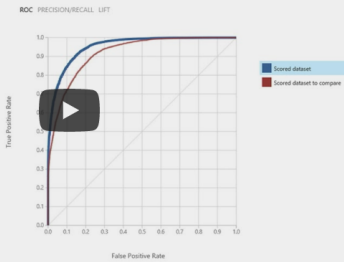
FORMULA	METRIC
$\frac{TP+TN}{TP+FP+FN+TN}$	Accuracy
$\frac{TP}{TP+FP}$	Precision
$\frac{TP}{TP+FN}$	Recall
$2 * \frac{Precision * Recall}{Precision + Recall}$	F1 score

SUBMIT

Model Evaluation Charts

Model Evaluation Charts for Classification

Receiver operating characteristics (ROC)



QUESTION 2 OF 2

In the **Receiver Operating Characteristics (ROC)** chart that we just looked at, the **Area Under the Curve (AUC)** for the diagonal line is 0.5. What does this indicate?

- ☐ A classifier that performs perfectly
- ☐ A classifier that performs moderately well
- ☒ A classifier that performs no better than random guessing
- ☐ A classifier that is always (or almost always) wrong

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NEXT